IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-62 (canceled).

63. (new) A method of producing drug delivery particles with improved drug delivery characteristics by altering aerodynamic properties thereof, said method comprising the steps of:

a) providing pharmaceutically acceptable hollow particles, which comprise a water soluble material;

b) contacting the particles with a pharmaceutically acceptable fluid that increases the initial hollow volume of the particles, wherein said fluid comprises at least 94% by volume of a non-solvent for the particles, to obtain particles having increased initial hollow volume; and

c) harvesting the drug delivery particles of increased initial hollow volume.

64. (new) The method of claim 63, further comprising contacting the particles with at least one agent that promotes a change in at least one morphological, chemical or physical characteristic of the particles.

65. (new) The method of claim 64, wherein the at least one agent is selected from the group consisting of consisting of corticosteroids, anti-inflammatories, anti-tussives, bronchodilators, diuretics, anticholinergics, hormones, analgesics, vaginal preparations, antiallergics, anti-infectives, antihistamines, anti-neoplastic agents, anti-tuberculous agents, proteins, polymeric drugs, lipids, organic substances, inorganic substances, nutrients, antigens peptides and derivatives thereof.

66. The method of claim 64, wherein the at least one agent is a polymer selected from a group consisting of polyvinyl alcohol, polyvinylpyrolidone and polyethylene

glycols.

67. (new) The method of claim 63, wherein the hollow particles comprises a combination of polyvinyl alcohol and lactose, a combination of polyvinylpyrolidone and lactose, or lactose.

68. (new) The method claim 63, further comprising exposing the particles to at least one environmental element during the method to promote a change in one or more of the morphological, chemical or physical features of the particle.

69. (new) The method of claim 68, wherein the at least one environmental element is selected from the group consisting of heat, moisture, radiation, pressure, shear forces, magnetic forces, vibration, stirring, vortexing, vacuum, mixing, tumbling, centrifuging, ultrasonication, extruding, and electrical.

70. (new) The method of claim 69, wherein the at least one environmental element is stirring.

71. (new) The method of claim 69, wherein the at least one environmental element is maintenance of the heat in a range of -200 to 200°C.

72. (new) The method of claim 64, wherein the agent promotes change in at least one morphological, chemical or physical feature selected from the group consisting of:
forming and/or promoting and/or controlling the growth of hairs;

modifying properties of the existing hairs;

promoting formation of pores;

modifying properties of existing pores;

modifying density, modifying and controlling particle size, controlling particle size growth, increasing or decreasing surface area or specific surface area of the particle;

reducing cohesiveness of the particles;

increasing flow of the particles;

forming and/Or modifying surface dimpling;

forming and/or modifying sponge-like formations; and alteration of particle surface roughness, improvement in the aerodynamic properties of the particle, ability of the particles to form a stable uniform mix, ability of the particles to improve blend uniformity and content uniformity.

73. The method of claim 72, wherein the agent promotes the formation of hairs on the surface of the hollow drug delivery particle.

74. (new) The method of claim 63, wherein the hollow particles are contacted with the fluid for between 1 microsecond and several hours.

75. (new) The method of claim 63, wherein the fluid is in a bulk liquid state, dispersed liquid state as droplets, mist, fog or spray, vapor state or combinations thereof, and is aqueous, organic, liquefied gaseous or a combination thereof.

76. (new) The method of claim 75, wherein the fluid is in a bulk liquid state selected from the group consisting droplets, mist, fog and spray.

77. (new) The method of claim 63, wherein the fluid is selected from the group consisting of water, hydrocarbon liquids, halogenated hydrocarbons, mineral spirit, mineral oils, mineral acids, oxygenated solvents, alcohols, nitrogen containing hydrocarbons, sulphur containing hydrocarbons, hetero-atom containing hydrocarbons, anaesthetics, liquefied gases, vapor from liquid nitrogen, refrigerants and mixtures thereof.

78. (new) The method of claim 77, wherein the fluid is water, acetone, ethanol, or a mixture thereof.

79. (new) The method of claim 63, wherein the contacting of the particle with fluid comprises introducing the fluid, static or in motion, to the particles, with the fluid in bulk,

as droplets, as a foam, as a mist, as fog or as a spray.

80. (new) The method of claim 63, wherein the contacting of the particles with fluid comprises introducing the particles, static or in motion, to the fluid in bulk, as dispersed particles, as droplets, as a foam, as a mist, as fog or as a spray.

81. (new) The method of claim 64, wherein the at least one agent is polyvinylpyrrolidone, lactose, or a therapeutic agent.

82. (new) The method of claim 82, wherein the at least one agent is a therapeutic agent selected from the group consisting of beclomethasone dipropionate, salbutamol sulphate, and fluticasone propionate.